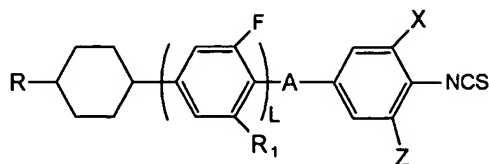


WHAT IS CLAIMED IS:

1. A nematic liquid crystal composition comprising a nematic liquid crystal compound represented by the following Chemical Formula 1:

Chemical Formula 1



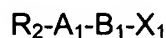
wherein: R is C_nH_{2n+1}O, C_nH_{2n+1}, or C_nH_{2n-1}, wherein n is an integer of 1 to 15; R₁ is H or F; L is an integer of 0 to 2; A is a single bond, -CH₂CH₂-, -COO-, -C=C-, or -C≡C-; X is H, F, Cl, or Br; Y is H, F, Cl, or Br; and at least one of X and Z is F.

2. The nematic liquid crystal composition according to Claim 1, which comprises:

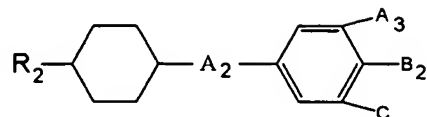
a) 1 to 80 wt% of the nematic liquid crystal compound represented by Chemical Formula 1; and

b) 20 to 99 wt% of one or more liquid crystal compounds selected from a group consisting of compounds represented by the following Chemical Formula 2, Chemical Formula 3, and Chemical Formula 4:

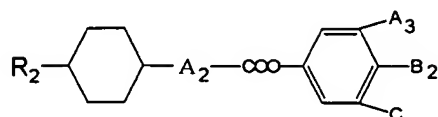
Chemical Formula 2



Chemical Formula 3



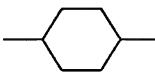
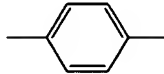
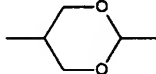
Chemical Formula 4



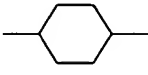
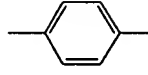
5 wherein:

each of R_2 is C_nH_{2n+1} or C_nH_{2n} , independently or simultaneously,

wherein n is an integer of 1 to 15,;

each of A_1 and B_1 is , , or ,
independently or simultaneously;

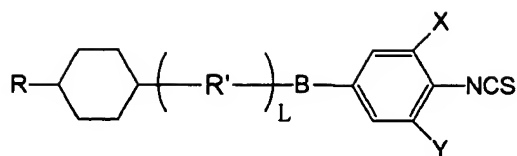
10 X_1 is F, CF_3 , OCF_3 , $CH=CF_2$, or $OCH=CF_2$;

each of A_2 is  or , independently or
simultaneously; and

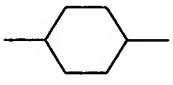
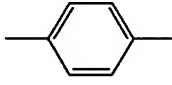
each of A_3 , B_2 and C is F, CF_3 , OCF_3 , or H, independently or
simultaneously.

15 3. A nematic liquid crystal composition comprising a nematic liquid
crystal compound represented by the following Chemical Formula 5:

Chemical Formula 5



wherein: R is $C_nH_{2n+1}O$, C_nH_{2n+1} , or C_nH_{2n-1} , wherein n is an integer of 1

to 15; R' is  or ; L is an integer of 0 to 2; B is a single bond, $-CH_2CH_2-$, $-COO-$, $-C=C-$, or $-C\equiv C-$; each of X and Y is H, F, Cl, or

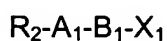
5 Br, independently or simultaneously; and at least one of X and Y is F.

4. The nematic liquid crystal composition according to Claim 3, which comprises:

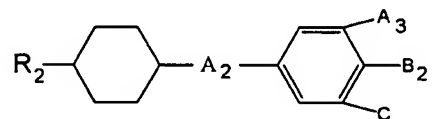
a) 1 to 80 wt% of the nematic liquid crystal compound represented by Chemical Formula 5; and

10 b) 20 to 99 wt% of one or more liquid crystal compounds selected from a group consisting of the compounds represented by the following Chemical Formula 2, Chemical Formula 3, and Chemical Formula 4:

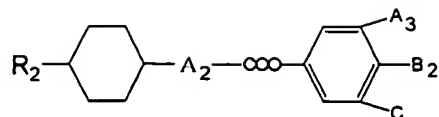
Chemical Formula 2



15 Chemical Formula 3



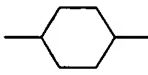
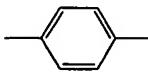
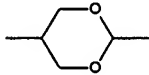
Chemical Formula 4



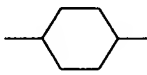
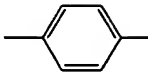
wherein:

each of R_2 is C_nH_{2n+1} or C_nH_{2n} , independently or simultaneously,

wherein n is an integer of 1 to 15,;

5 each of A_1 and B_1 is , , or ,
independently or simultaneously;

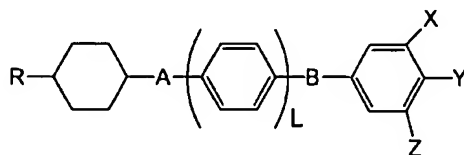
X_1 is F, CF_3 , OCF_3 , $CH=CF_2$, or $OCH=CF_2$;

each of A_2 is  or , independently or
simultaneously; and

10 each of A_3 , B_2 , and C is F, CF_3 , OCF_3 , or H, independently or
simultaneously.

5. A nematic liquid crystal composition comprising a nematic liquid
crystal compound represented by the following Chemical Formula 6:

Chemical Formula 6



15 wherein: R is $C_nH_{2n+1}O$, C_nH_{2n+1} , $C_nH_{2n+1}S$, or C_nH_{2n-1} , wherein n is an
integer of 1 to 15; A is phenyl, phenyl-cyclohexane, cyclohexane-phenyl, or a

single bond (-); L is 0 or 1; B is a single bond (-), CH_2CH_2 , $-\text{COO}-$, $-\text{C}=\text{C}-$, or $-\text{C}\equiv\text{C}-$; X is H, F, Cl, or Br; Y is NCS, SCN, or F; Z is H, F, Cl, or Br; at least one of X and Z is F; and at least one of A and B is not a single bond.

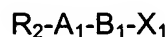
6. The nematic liquid crystal composition according to Claim 5, which
5 comprises:

a) 1 to 80 wt% of the nematic liquid crystal compound represented by
Chemical Formula 6; and

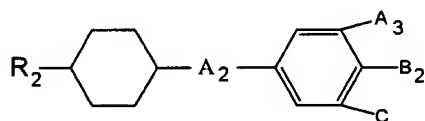
b) 20 to 99 wt% of one or more liquid crystal compounds selected from
a group consisting of the compounds represented by the following Chemical

10 Formula 2, Chemical Formula 3, and Chemical Formula 4:

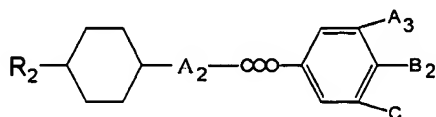
Chemical Formula 2



Chemical Formula 3



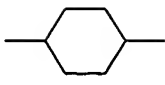
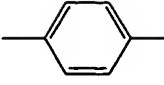
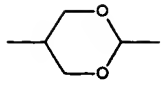
15 Chemical Formula 4



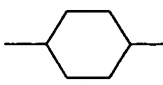
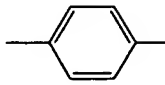
wherein:

each of R_2 is $\text{C}_n\text{H}_{2n+1}$, or C_nH_{2n} , independently or simultaneously,

wherein n is an integer of 1 to 15,;

each of A₁ and B₁ is , , or ,
independently or simultaneously;

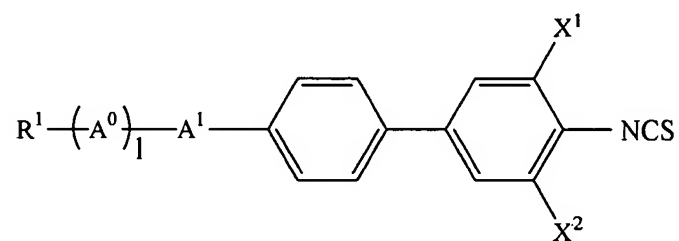
X₁ is F, CF₃, OCF₃, CH=CF₂, or OCH=CF₂;

5 each of A₂ is  or , independently or
simultaneously; and

each of A₃, B₂ and C is F, CF₃, OCF₃, or H, independently or
simultaneously.

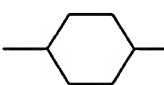
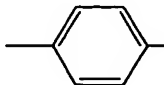
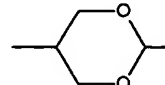
7. A nematic liquid crystal composition comprising a nematic liquid
10 crystal compound represented by the following Chemical Formula 7:

Chemical Formula 7



wherein:

R¹ is a C₁ to C₁₂ alkyl, wherein one or two separated CH₂ groups can
15 be substituted by an oxygen atom, -CO-, -OCO-, -COO-, or -C=C- group;

each of A⁰ and A¹ is , , or ,

independently or simultaneously;

each of X^1 and X^2 is F, Cl, CN, or NCS, independently or simultaneously; and

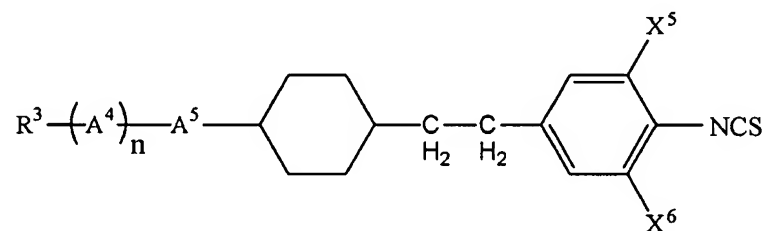
l is 0 or 1.

5 8. The nematic liquid crystal composition according to Claim 7, which comprises:

a) 20 to 80 wt% of the nematic liquid crystal compound represented by Chemical Formula 7; and

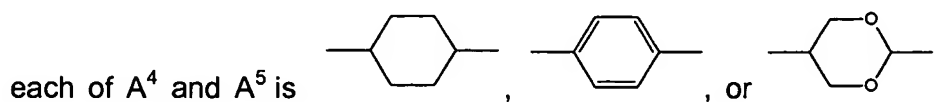
b) 20 to 80 wt% of a nematic liquid crystal compound represented by
10 the following Chemical Formula 8:

Chemical Formula 8



wherein:

R^3 is a C_1 to C_{12} alkyl; wherein one or two separated CH_2 groups can
15 be substituted by an oxygen atom, $-CO-$, $-OCO-$, $-COO-$, or $-C=C-$ group;



independently or simultaneously;

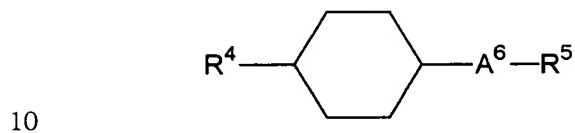
each of X^5 and X^6 is F, Cl, CN, or NCS, independently or simultaneously; and

n is 0 or 1.

9. The nematic liquid crystal composition according to Claim 7, which
5 further comprises:

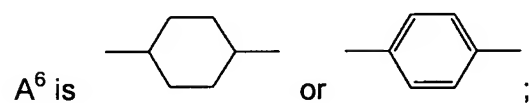
c) one or more compounds selected from a group consisting of the nematic liquid crystal compounds represented by the following Chemical Formula 9, Chemical Formula 10, and Chemical Formula 11:

Chemical Formula 9

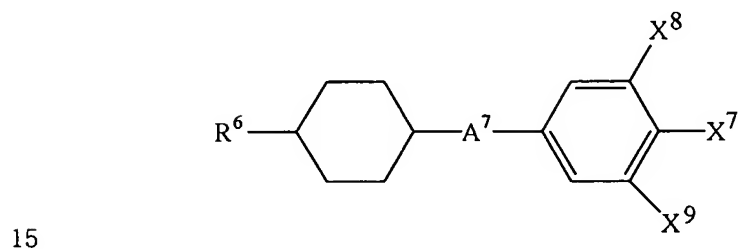


wherein:

R^4 is a C_1 to C_{12} alkyl, and R^5 is a C_1 to C_{12} alkyl or alkoxy; and

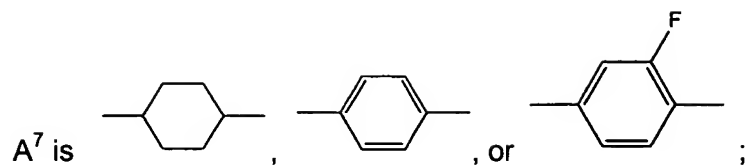


Chemical Formula 10



wherein:

R^6 is a C_1 to C_{12} alkyl;

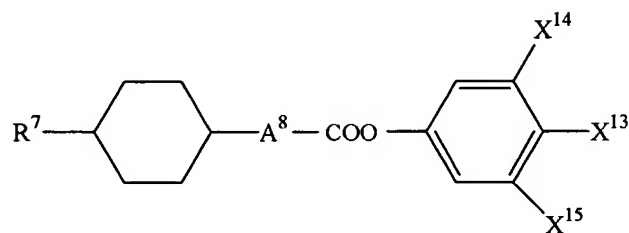


X^7 is H, F, Cl, or OCH_3 ; and

5 each of X^8 and X^9 is H, F, or Cl, independently or simultaneously;

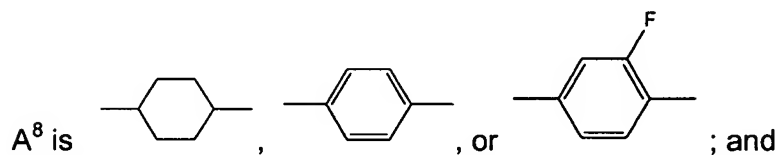
and

Chemical Formula 11



wherein:

10 Here, R^7 is a C_1 to C_{12} alkyl;



each of X^{10} , X^{11} and X^9 is H, F, or Cl, independently or simultaneously.

10. A liquid crystal display comprising the nematic liquid crystal composition according to Claim 1.

15 11. The liquid crystal display according to Claim 10, which is an active

matrix type TN (twist nematic), STN, OCB, TFT-TN mode liquid crystal display, or an IPS (in plane switching) mode or FFS (fringe field switching) mode liquid crystal display.

12. The liquid crystal display according to Claim 10, which is an AOC
5 or COA liquid crystal display, or an OCB (optically compensated bend) mode liquid crystal display.

13. A liquid crystal display comprising the nematic liquid crystal composition according to Claim 3.

14. The liquid crystal display according to Claim 13, which is an active
10 matrix type TN (twist nematic), STN, OCB, TFT-TN mode liquid crystal display, or an IPS (in plane switching) mode or FFS (fringe field switching) mode liquid crystal display.

15. The liquid crystal display according to Claim 13, which is an AOC or COA liquid crystal display, or an OCB (optically compensated bend) mode
15 liquid crystal display.

16. A liquid crystal display comprising the nematic liquid crystal composition according to Claim 5.

17. The liquid crystal display according to Claim 16, which is an active matrix type TN (twist nematic), STN, OCB, TFT-TN mode liquid crystal display,
20 or an IPS (in plane switching) mode or FFS (fringe field switching) mode liquid

crystal display.

18. The liquid crystal display according to Claim 16, which is an AOC or COA liquid crystal display, or an OCB (optically compensated bend) mode liquid crystal display.

5 19. A liquid crystal display comprising the nematic liquid crystal composition according to Claim 7.

20. The liquid crystal display according to Claim 19, which is an active matrix type TN (twist nematic), STN, OCB, TFT-TN mode liquid crystal display, or an IPS (in plane switching) mode or FFS (fringe field switching) mode liquid
10 crystal display.

21. The liquid crystal display according to Claim 19, which is an AOC or COA liquid crystal display, or an OCB (optically compensated bend) mode liquid crystal display.